IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1.   (Currently Amended) A network system, ~~including~~ comprising:

a client terminal ~~which~~ that requests a peer-to-peer communication; and

a host terminal ~~which~~ that supports ~~establishing~~ a connection of the peer-to-peer communication,

wherein said client terminal generates a request message that contains an IP address of said [[own]] client terminal, and said client terminal sends out the request message to said host terminal via a transmission mail server,

wherein said host terminal acquires the request message via a reception mail server, said host terminal extracts the IP address of said client terminal from a description content of the request message, said host terminal stores the extracted IP address in a table, said host terminal selects at least one IP address from the table and generates a reply message containing the [[thus]] selected at least one IP address, and said host terminal sends [[out]] the reply message to said client terminal via the transmission mail server, and

wherein said client terminal acquires the reply message via the reception mail server, said client terminal extracts at least one IP address of other terminals from a description content of the rely message, and said client terminal starts a peer-to-peer communication of data transmission and reception with another terminal which is specified based on the [[thus]] extracted IP address.

2.   (Currently Amended) A method of establishing a network connection, the method including comprising:

generating a request message that contains an IP address of a client terminal requesting a peer-to-peer communication;

sending [[out]] the request message, via a transmission mail server, to a host terminal that supports establishing a connection of the peer-to-peer communication;

acquiring by the host terminal the request message via a reception mail server;

extracting by the host terminal the IP address of the client terminal from a description content of the request message;

storing by the host terminal the IP address extracted by said extracting, in a table;

selecting by the host terminal at least one IP address from the table and generating a reply message that contains the at least one IP address [[thus]] selected;

sending, [[out]] by the host terminal, the reply message to the client terminal, via the transmission mail server;

acquiring by the client terminal the reply message, via the reception mail server;

extracting by the client terminal at least one IP address of other terminals from a description content of the reply message; and

starting a peer-to-peer communication of data transmission and reception with other terminals which are specified based on the IP address extracted by the client terminal in said extracting.

3.   (Currently Amended) A method according to claim 2, wherein said generating a

request message includes encrypting the IP address and including the [[thus]] encrypted IP

address in the request message, and

wherein said extracting by the host terminal includes extracting the encrypted

message from the request message and decoding the [[thus]] extracted encrypted message.

4.   (Currently Amended) A method according to claim 2,

wherein said generating a reply message includes encrypting the at least one IP

address and including the [[thus]] encrypted IP address in the reply message, and

wherein said selecting by the host terminal includes selecting the encrypted at

least one IP address and then decoding [[it]] the selected encrypted IP address.

5.   (Currently Amended) A network terminal, ~~including~~ comprising:

a data generator which generates a request message that contains an IP address of

[[own]]the network terminal;

a mail transmission and reception unit which sends out the request message to a

second terminal serving as a host, via a transmission mail server, and which acquires a reply

message serving as a response generated by and sent from the second terminal serving as a host,

via a reception mail server;

a selection processing unit which extracts at least one IP address of other

terminals from a description content of the reply message; and

a data exchanging unit which starts a peer-to-peer communication of data

transmission and reception with ~~another~~ a third terminal which is specified based on the IP

address extracted by said selection processing unit.

6.   (Original) A network terminal according to claim 5, wherein said data generator

encrypts the IP address and has the encrypted IP address contained in the request message, and

said selection processing unit extracts the encrypted IP address from the reply message and

decodes the extracted IP address.

7.   (Currently Amended) A network terminal according to claim 5,

          wherein, if ~~unsuccessful is~~ data transmission and reception are unsuccessful with

a destination terminal whose IP address is the extracted IP address, said data generator generates

a message containing said IP address, and

          wherein said mail transmission and reception unit sends, [[out]] to the terminal

serving as a host, said message indicative of an unsuccessful connection.

8.   (Currently Amended) A network terminal, ~~including~~ comprising:

          a mail transmission and reception unit which acquires, via a reception mail server,

a request message containing an IP address of a second terminal that requests a peer-to-peer

communication;

          an extraction processing unit which extracts the IP address from a description

content of the request message;

          an address storage unit which stores the extracted IP address in a table; and

          a data generator which selects at least one IP address from a storage content of the

table and generates a reply message that contains the [[thus]] selected IP address,

wherein said mail transmission and reception unit sends out the reply message to

the requesting terminal, via a transmission mail server.

9.   (Currently Amended) A network terminal according to claim 8,

            wherein said extraction processing unit extracts an encrypted IP address from a

description content of the request message and decodes the encrypted IP address, and

            wherein said data generator encrypts the at least one IP address and has [[this]]

the encrypted IP address included in the reply message.

10.   (Currently Amended) A network terminal according to claim 8, wherein said

address storage unit restricts the number of IP addresses to be stored in the table, and overwrites

IP addresses previously stored in the past by those to be stored anew.

11.   (Currently Amended) A network terminal according to claim 8, wherein said data

generator selects from the storage content of the table an IP address stored more recently a

previously stored IP address.

12.   (Original) A network terminal according to claim 8,

            wherein said mail transmission and reception unit acquires a message containing

an IP address of a destination terminal with which the requesting terminal fails to start the data

transmission and reception, via the reception mail server, and said extraction processing unit

extracts the failure IP address from a description content of the message, and

wherein said address storage unit distinguishes the failure IP address from other

IP addresses.

13.   (Currently Amended) A method of establishing a network connection, the method

~~including~~ comprising:

generating a request message containing an IP address of a first terminal that

requests a peer-to-peer communication;

sending [[out]] the request message to a second terminal serving as a host, via a

transmission mail server;

acquiring a reply message serving as a response generated by and sent from the

second terminal serving as a host, via a reception mail server;

extracting at least one IP address ~~of other terminals~~ from a description content of

the reply message; and

starting a peer-to-peer communication of data transmission and reception with

~~another~~ at least one other terminal which is specified based on the IP address extracted by said

extracting.

14.   (Currently Amended) A method of establishing a network connection, the method

~~including~~ comprising:

acquiring, via a reception mail server, a request message containing an IP address

of a terminal that requests a peer-to-peer communication;

extracting the IP address from a description content of the request message;

storing the extracted IP address in a table;

selecting at least one IP address from a storage content of the table and generating

a reply message that contains the [[thus]] selected IP address; and

sending [[out]] the reply message to the requesting terminal, via a transmission

mail server.

15-16.   (Canceled)

17.   (Currently Amended) A computer-readable recording medium which stores a

program executable by a computer, the program ~~including~~ comprising the functions of:

generating a request message containing an IP address of a first terminal that

requests a peer-to-peer communication;

sending [[out]] the request message to a second terminal serving as a host, via a

transmission mail server;

acquiring a reply message serving as a response generated by and sent from the

second terminal serving as a host, via a reception mail server;

extracting at least one IP address of other terminals from a description content of

the reply message; and

starting a peer-to-peer communication of data transmission and reception with

~~another~~ at least one other terminal which is specified based on the IP address extracted by the

extracting.

18.   (Currently Amended) A computer-readable recording medium which stores a

program executable by a computer, the program ~~including~~ comprising the functions of:

acquiring, via a reception mail server, a request message containing an IP address of a terminal that requests a peer-to-peer communication;

extracting the IP address from a description content of the request message;

storing the extracted IP address in a table;

selecting at least one IP address from a storage content of the table and generating a reply message that contains the [[thus]] selected IP address; and

sending out the reply message to the requesting terminal, via a transmission mail server.